

Winter Season Survival Guide





Your Winter Survival Guide

The winter season is upon us, which means snow, ice, sleet, rain and freezing temperatures. This time of year, it's nice to see snow blanketing the streets, trees and rivers, but it can also be a dangerous time if one is not careful.

With that in mind, we would like to share some of our best tips and resources so you may have an enjoyable and safe winter season.

Visit our website for more winter advisory materials at www.safetycenter.navy.mil/safetips/holidayhazards.htm.

Our 24/7 Holiday Force Preservation campaign is also underway. From Thanksgiving through New Year's, ensure that everyone takes every step necessary to avoid mishaps. Because this is a period commonly used for winter leave and vacation, more people will be on the road to visit family and friends for the holidays. Visit our 24/7 holiday stop at www.safetycenter.navy.mil/seasonal/247-7Holiday/.

You may print this as a handout or pull information to include in your newsletter or Plan of the Day/Week.



Winter, Your Car, and You

Driving in the winter means snow, sleet, and ice that can lead to slower traffic, hazardous road conditions, hot tempers and unforeseen dangers. To help you make it safely through winter, here are some suggestions from the National Safety Council to make sure that you and your vehicle are prepared.

Weather

At any temperature-20 degrees Fahrenheit below zero or 90 degrees Fahrenheit above-weather affects road and driving conditions and can pose serious problems. It is important to listen to forecasts on radio, TV, cable weather channel, or forecasts in the daily papers.

Your Car

Prepare your car for winter. Start with a checkup that includes:

- Checking the ignition, brakes, wiring, hoses and fan belts.
- Changing and adjusting the spark plugs.
- Checking the air, fuel and emission filters, and the PCV valve.
- Inspecting the distributor.
- Checking the battery.
- Checking the tires for air, sidewall wear and tread depth.
- Checking antifreeze level and the freeze line.
- Your car should have a tune-up (check the owner's manual for the recommended interval) to ensure better gas mileage, quicker starts and faster response on pick-up and passing power.



Winter, Your Car, and You

Necessary Equipment

An emergency situation on the road can arise at any time and you must be prepared. Following the tune up, a full tank of gas, and fresh anti-freeze, your trunk should carry:

- A properly inflated spare tire, wheel wrench and tripod- type jack
- A shovel
- Jumper cables
- Tow and tire chains
- A bag of salt or cat litter
- Tool kit

Essential Supplies

Be prepared with a "survival kit" that should always remain in the car. Replenish after use. Essential supplies include:

- Working flashlight and extra batteries
- Reflective triangles and brightly-colored cloth
- Compass
- First aid kit
- Exterior windshield cleaner
- Ice scraper and snow brush
- Wooden stick matches in a waterproof container
- Scissors and string/cord
- Non-perishable, high energy foods like unsalted canned nuts, dried fruits, and hard candy
- In addition, if you are driving long distances under cold, snowy, and icy conditions, you should also carry supplies to keep you warm, such as heavy woolen mittens, socks, a cap, and blankets.



Winter, Your Car, and You

If You Become Stranded

- Do not leave your car unless you know exactly where you are, how far it is to possible help, and are certain you will improve your situation.
- To attract attention, light two flares and place one at each end of the car a safe distance away. Hang a brightly colored cloth from your antenna.
- If you are sure the car's exhaust pipe is not blocked, run the engine and heater for about 10 minutes every hour or so depending upon the amount of gas in the tank.
- To protect yourself from frostbite and hypothermia use the woolen items and blankets to keep warm.
- Keep at least one window open slightly. Heavy snow and ice can seal a car shut.
- Eat a hard candy to keep your mouth moist.



Winter Driving

- Traffic jams, sudden storms and detours might mean that you have to spend much longer than you planned in your car. It can take two to three hours to drive as little as 15 miles on an icy road. Put together a winter-driving kit, including a pair of gloves, a warm hat, and a blanket.
- Carry a plastic bottle of sand mixed with rock-salt in the trunk of your car. If you get stuck on sheet ice, sprinkling some around the tire may provide traction. Some people fill up empty gallon paint cans with sand and replace the lids, instead of carrying bags of sand. Roofing shingles also work well.
- When the gas tank in your car gets to half full, fill it up. You never know when a massive traffic jam will snare you.
- If you're going out of town, let someone know where you're going and the estimated time of arrival at your destination. Make sure your cell phone is fully charged in case you have to make an emergency call.
- Pack an emergency kit including first-aid and prescription medications, bandages, and other first-aid necessities.
- Pack a car maintenance bag including cable jumpers, window scrapers, a bag of salt or cat litter, windshield wiper fluid, and other necessities to keep your car running in case you become stranded.



Driving In Snow and Ice

- If you don't have to drive--don't! But if you must, drive defensively and smart.
- Before beginning your trip, know the current road conditions. Call 1-800-367-ROAD or visit your state's Department of Transportation website.
- Be alert for potential driving hazards including downed branches, trees, electric lines and icy areas, such as shady spots and bridges.
- Leave a few minutes early to allow extra time to get to your destination.
- Slow down. Triple the usual distance between your car and the one ahead.
- Stay in the plowed lane; avoid driving over the ridges between the plowed areas. If you must switch lanes, slow down, signal and move over slowly.
- Don't pass a snowplow or spreader unless it is absolutely necessary.
- Don't park along the street. Snowplow drivers can't fully clear a road if cars are in their way.
- If you skid, steer into the skid. If the back of your car is skidding to the left, for example, turn the steering wheel to the left.
- Don't pump your brakes, and avoid locking them up. If your brakes lock, take your foot off the brake pedal for a moment.
- If you're involved in a fender-bender, move the cars out of the lanes of travel.
- Keep an emergency winter driving kit with a blanket and flashlight in the car.
- While driving, keep your headlights on. Keep snow and ice off your mirrors, windows and lights.
- As always, wear your seatbelts.
- If your car has an Anti-lock Braking System (ABS) and you must brake, be sure to press the brake pedal and hold.



Roadside Emergency Kit

Emergency Kit:

- Road Flare with Matches / Warning Triangle
- Auto Distress Flag
- Cell Phone
- Safety Reflector Vest
- Jumper Cables
- First Aid Kit / CPR Mouth Piece
- Flashlight with Extra Batteries
- Fire Extinguisher
- Bottled Water
- Crackers or Cookies / Granola or Energy Bars
- Extra Fuses
- Gloves
- Nonflammable Tire Inflator
- Rags
- Auto Manual
- Road Maps
- Hand Cleaner / Wet Naps
- Whistle
- Spending Money / Change
- Extra Pair of Walking Shoes

Tools:

- Screwdrivers (Flat and Phillips Head)
- Pliers
- Vise Grips
- Adjustable Wrench
- Shovel
- Roll of Duct Tape
- Pocketknife / Multi-tool
- Tire Pressure Gauge
- Funnel
- Wire or Rope

Fluids:

- Empty Gas Can
- Two Quarts of Oil
- Gallon of Antifreeze
- Brake Fluid
- Automatic Transmission Fluid

Items to Include Based on Climate:

- Ice Scraper
- Emergency Thermal Blanket
- Traction Aids (Sand, Rock Salt, or Kitty Litter)
- Jacket or Raincoat, Boots
- Umbrella
- Extra Water
- Tire Chains (Snow)



Jump-Starting A Car Battery

- Most people think they know how to jump-start a car's battery, but you'd be amazed how many people do it the wrong way. Follow these suggestions when getting your car back on the road.
- Check your owner's manual before jump-starting your car or using it to jump-start another car. Some new cars had specific instructions or prohibit jump-starting.
- If it is OK to jump-start, attach the jumper cables correctly.
 - Clamp one cable to the positive (+) terminal of the dead battery. Don't let the positive cable touch anything metal other than the battery terminals.
 - Connect the other end of the positive cable to the positive terminal of the good battery.
 - Connect one end of the negative (-) cable to the negative terminal of the good battery.
 - Connect the other end of the negative cable to metal on the engine block on the car with the dead battery. Don't connect it to the dead battery, carburetor, fuel lines or moving parts.
 - Stand back and start the car with the good battery.
 - Start the stalled car.
 - Remove the cables in reverse order.
- Wear a pair of splash-proof, polycarbonate goggles with the designation Z-87 on the frame. This certifies that your goggles are meant for activities such as automotive repair.
- Batteries contain sulfuric acid, which gives off flammable and explosive gas when a battery is charged or jump-started. Never smoke or operate anything that may cause a spark when working on a battery.
- Whenever you change the oil, take time to check your battery for damage such as cracks, corrosive materials and loose wires.
- Make sure you have a pair of jumper cables that are free of rust and corrosion and have no exposed wires. (Never use electrical tape to cover exposed wires.)
- Make sure you buy a battery that is recommended in your car owner's manual.
- Never throw an automobile battery in a garbage dumpster or leave it in a parking lot, especially if it is cracked or damaged. Take it to a service station and have it disposed of properly.
- Never jump-start your battery if your car's fluids are frozen.
- When buying a new battery, make sure that its terminals are sturdy and large enough to allow the clamps of a pair of jumper cables to attach easily when jump-starting.
- Always call a professional if you think there might be trouble you can't handle, or you can't remember how to jump-start a vehicle.
- Prevent Blindness America offers a battery safety sticker that lists the correct steps to take when jump-starting a dead battery. To get one, call 1-800-331-2020.



Winter Storms

- The hazards of winter storms are dramatic: wind-driven snow that makes it impossible to see, creates large drifts and lowers the wind chill.
- Blizzards and ice storms can knock down trees, utility poles and power lines. Even small amounts of ice are extremely hazardous to motorists and pedestrians.
- If you are stuck in a storm and are exposed to cold for an extended period, frostbite or hypothermia is possible and can be life-threatening.
- Advisories are issued by the National Weather Service (NWS) when the public should be alerted to possible storms. A winter storm watch is issued when severe winter conditions are possible within the next 12 to 48 hours. The NWS issues a winter storm warning when severe winter weather conditions are occurring or expected to occur within a few hours.
- Take action before a winter storm strikes.
- Check NOAA's [national weather service](#).
- "Winterize" your car with fresh antifreeze and a strong battery. Use snow tires. Keep a winter survival kit in your car.
- During a storm, listen to NOAA weather radio, local radio or television for the latest weather reports and emergency information.
- If you must be outside, wear plenty of layers of clothing. Don't over-exert yourself. Make sure you wear a hat, because the largest amount of body heat is lost through the top of the head.
- If you get stranded in your car, stay with it until help arrives. Do not try to walk for help during a blizzard.



Preparing for Power Outages

SAFETY ISSUES

- Purchase needed items for your home, office and car including: flashlights, batteries, AM/FM battery powered radio, rechargeable power failure lights, wind up or battery alarm clock, and light sticks.
- Have a 72-hour emergency kit for each family member.
- Keep cash and change on hand. In power failures ATMs may not work and you may need to make a phone call at a pay phone.
- Phones with answering machines and cordless phones are power dependent. Have at least one phone that does not require power in case you need to call 9-1-1. Keep your cell phone powered up.
- Familiarize yourself with your main electrical panel. You may have to turn off the main breaker or have to reset circuit breakers after an outage.
- If you use your fireplace for heat, be responsible! Don't burn wood with paint or stain. Do not leave an open flame. Make sure you close your fireplace screen to prevent sparks from flying. Do not store newspapers, kindling, or matches near the fireplace.
- If you use candles for lighting, place them on a fire proof surface.
- Make sure you have smoke detectors in appropriate rooms. Change the batteries regularly, preferably every 6 months, and test them monthly. If your smoke detectors are wired directly into the electrical system of your home they will not operate during a power failure unless the batteries are working. Special smoke detectors are available for people with hearing impairment.
- Have a fire extinguisher and know how to operate it. Have a fire evacuation plan and practice fire drills.
- During the power outage, unplug all small appliances and electronics to avoid damage from power surge. Leave one low wattage incandescent light on so you know when the power comes back on.
- When power comes back on you may have to reset your clocks, VCRs, microwave ovens, programmable thermostats, burglar and fire alarms.



Preparing for Power Outages

SECURITY ISSUES

- Have a plan for checking on and reuniting family members.
- Stay home and be safe during a power outage. Stores and gas stations may be closed. Don't add to the confusion by driving around.
- During an area-wide power outage, traffic signals may be out. If so, remember the intersection becomes a 4-way Stop.
- Watch for suspicious activity. Criminals may decide to take advantage of the power outage. Always call 9-1-1 if you notice suspicious activity.

HEALTH ISSUES

- Focus on children's needs. Provide flashlights or light sticks for each child that they can keep by their bed and in their backpacks. Discuss living without electricity and how the outage is usually short term.
- Elderly people and people with disabilities who are on power-dependent medical devices should arrange for back-up power with their vendors. Power-dependent devices include: medication pumps connected to IV, including pain control, anti-arrhythmia and chemotherapy; dialysis machines; home ventilators; and backup oxygen tanks.
- People who are medically dependent on electricity may need portable generators. Safely store fuel only in approved containers, outside, never in garages. Operate generators only outside, ensuring that exhaust will not enter the home through vents or windows. Only use fresh gasoline because old gasoline can ignite. Plug appliances directly into the generator using heavy-duty extension cords. NEVER attach generators to the facility current.
- All hospitals are required to have backup power. Medically dependent persons without adequate back-up power can call 911 for transport to a hospital where power can be supplied until the outage is over.
- Have a first aid kit in your home, office, and car. Take first aid and CPR training.
- Sewer pump stations have limited storage capacity. Limit all water usage, and avoid flushing your toilet during a power outage.
- Be a good neighbor and check on any neighbors with special needs: elderly people, people with disabilities, and children who are home alone during a power outage. They may need your help.



Shoveling Snow

When Blue Cross Blue Shield of Michigan looked at hospital emergency room admissions after a recent blizzard, the health insurer found that the number of people showing up with cardiac-related conditions skyrocketed by 59 percent during the first 24 hours of the storm. Why? People were shoveling snow. Here are some Safe Tips to keep in mind while shoveling snow:

- **Dress in Layers** -- Most people throw on a heavy coat, then quickly overheat once they've been at it a few minutes. This puts your heart under greater strain. Try wearing a shirt under a sweater under a light jacket, and strip off layers as you warm up.
- **Drink Water** -- Most people shovel snow in the morning when they're dehydrated. Dehydration also stresses the heart, so drink a couple of glasses of water about thirty minutes before you start tossing snow.
- **Take it Slow** -- Take a break every 5 or 10 minutes while you're working. And never let your heart rate exceed 85 percent of its maximum. To find out your maximum heart rate subtract your age from 220.
- **Don't Ignore Chest Pain or Tightness** -- If this kind of ache strikes assume the worst and call an ambulance or have someone drive you to an emergency room.



Sledding and Tobogganing

Sliding downhill is an exhilarating winter sport. People of all ages can participate, and use all kinds of containers, from large toboggans to plastic disks or even cardboard boxes. But sledding unintentional injuries are surprisingly common despite snow's cushioning effect. Estimates of the number of injuries treated in hospital emergency rooms every year show about 33,000 sledding injuries and 1,500 from tobogganing.

Sledding injuries often include facial lacerations or skull fractures. Tobogganing injuries almost always involve the lower half of the body.

Children ages 5 to 9 are most susceptible to injury. Parents of young children should not let them sled alone. Older children should be taught to check for hazards.

The National Safety Council offers these guidelines for safe and fun sledding and tobogganing:

- Keep all equipment in good condition. Broken parts, sharp edges, cracks and split wood invite injuries.
- Dress warmly enough for conditions.
- Sled on spacious, gently sloping hills which have a level run-off at the end so that the sled can come to a halt safely. Avoid steep slopes and slopes located near streets and roadways.
- Check slopes for bare spots, holes and other obstructions which might cause injury. Bypass these areas or wait until conditions are better.
- Make sure the sledding path does not cross traffic and is free from hazards such as large trees, fences, rocks or telephone poles.
- Do not sled on or around frozen lakes, streams or ponds because the ice may be unstable.
- The proper position for sledding is to sit or lay on your back on the top of the sled, with your feet pointing downhill. Sledding head first increases the risk of head injury and should be avoided.
- Sledders should wear thick gloves or mittens and protective boots to protect against frostbite as well as potential injury.



Skiing and Snowboarding

Tips for Prior to Hitting the Slopes

- Get in shape. Don't try to ski yourself into shape. You'll enjoy skiing more if you're physically fit.
- Obtain proper equipment. Be sure to have your ski or snowboard bindings adjusted correctly at a local ski shop. You can rent good ski or snowboarding equipment at resorts.
- When buying skiwear, look for fabric that is water- and wind-resistant. Look for wind flaps to shield zippers, snug cuffs at wrists and ankles, collars that can be snuggled up to the chin and drawstrings that can be adjusted for comfort and keep wind out. Be sure to buy quality clothing and products.
- Dress in layers. Layering allows you to accommodate your body's constantly changing temperature. For example, dress in polypropylene underwear (top and bottoms), which feels good next to the skin, dries quickly, absorbs sweat and keeps you warm. Wear a turtleneck, sweater and jacket.
- Be prepared. Mother Nature has a mind of her own. Bring a headband or hat with you to the slopes, 60 percent of heat-loss is through the head. Wear gloves or mittens (mittens are usually better for those susceptible to cold hands).
- Wear sun protection. The sun reflects off the snow and is stronger than you think, even on cloudy days!
- Always wear eye protection. Have sunglasses and goggles with you. Skiing and snowboarding are a lot more fun when you can see.



Skiing and Snowboarding

Tips for while on the Slopes

- Take a lesson. Like anything, you'll improve the most when you receive some guidance. The best way to become a good skier or snowboarder is to take a lesson from a qualified instructor.
- The key to successful skiing/snowboarding is control. To have it, you must be aware of your technique, the terrain and the skiers/snowboarders around you.
- Be aware of the snow conditions and how they can change. As conditions turn firm, the skiing gets hard and fast. Begin a run slowly.
- Skiing and snowboarding require a mental and physical presence.
- If you find yourself on a slope that exceeds your ability level, always leave your skis/snowboard on and side step down the slope.
- The all-important warm-up run prepares you mentally and physically for the day ahead. Drink plenty of water. Be careful not to become dehydrated.
- Curb alcohol consumption. Skiing and snowboarding do not mix well with alcohol or drugs.
- Know your limits. Learn to ski and snowboard smoothly-and in control. Stop before you become fatigued and, most of all have fun.
- If you're tired, stop skiing. In this day and age of multi-passenger gondolas and high-speed chairlifts, you can get a lot more time on the slopes compared to the days of the past when guests were limited to fixed grip chairlifts.



Skiing and Snowboarding

Establish a “Responsibility Code.”

The Responsibility Code

- Skiing can be enjoyed in many ways. At ski areas you may see people using alpine, snowboard, cross country and other specialized ski equipment, such as that used by disabled or other skiers. Regardless of how you decide to enjoy the slopes, always show courtesy to others and be aware that there are elements of risk in skiing that common sense and personal awareness can help reduce. Observe the code listed below and share with other skiers the responsibility for a great skiing experience.
- Always stay in control.
- People ahead of you have the right of way.
- Stop in a safe place for you and others.
- Whenever starting downhill or merging, look uphill and yield.
- Use devices to help prevent runaway equipment.
- Observe signs and warnings, and keep off closed trails.
- Know how to use the lifts safely.

KNOW THE CODE. IT'S YOUR RESPONSIBILITY



Ice Skating Safety

- Ice skating is a fun winter activity, and also a great exercise! The National Safety Council offers these tips to help you and your family enjoy safe skating.
- Wear skates that fit comfortably and provide enough ankle support to keep you on your feet.
- Have the blades professionally sharpened at the beginning of each season.
- Skate only on specially prepared skating areas where you are sure the ice is strong enough to withstand your weight.
- Always check for cracks, holes and other debris.
- Before setting out on your skating expedition, learn basic skating skills, such as how to stop and fall safely.
- Wear warm clothing and rest when you become tired or cold.
- Never skate alone.



Hypothermia

- When your core body temperature falls suddenly below its normal level of 98.6 F, you are hypothermic. Skiers, hikers and fishermen are at risk, and this condition can occur unexpectedly, even on days when the temperature is 60 degrees. All it takes is wet clothes and a brisk breeze. Other factors can contribute, such as if you are hungry and tired, or if you've been drinking alcohol.
- You may not be aware of the condition, and others may not notice until your core body temperature has dropped dangerously low.
- To treat someone for hypothermia, gradually warm their body. Get them out of wet or cold clothing, and wrap them in layers of dry, warm clothing. Give them something warm to drink (avoid alcohol and caffeine).
- Don't move the victim unless staying put is even more risky or dangerous.
- To avoid hypothermia:
 - Wear clothes that are made of wool and that are windproof. In spite of advances in synthetic fibers, wool is still a superior insulator.
 - Wear loose garments that don't restrict your circulation.
 - Layers of light clothing are better than a heavy layer.
 - If you get wet, change into dry clothes.
 - Keep your hands, head, and feet covered--that's where your body loses the most heat.
- Pay attention to the forecast winds as well as the temperature when deciding what to wear.
- Symptoms vary depending on the severity of the chill. Victims of mild hypothermia often shiver uncontrollably and appear clumsy. Moderate hypothermia slurs their speech, appear dazed and act irrationally. Sometimes they don't feel cold. Victims of severe hypothermia have dilated pupils, pale skin, a slow pulse. Their muscles become rigid, and they eventually stop shivering. Ultimately, they collapse, and in the final stages, stop breathing.



Staying Warm

Prolonged exposure to low temperatures, wind and/or moisture can result in cold-related injury from frostbite and hypothermia. Here are some suggestions on how to keep warm and avoid frostbite and hypothermia.

Dress properly

- Wear several layers of loose-fitting clothing to insulate your body by trapping warm, dry air inside. Loosely woven cotton and wool clothes best trap air and resist dampness.
- The head and neck lose heat faster than any other part of the body. Your cheeks, ears and nose are the most prone to frostbite. Wear a hat, scarf and turtleneck sweater to protect these areas.

Frostbite: What to look for

- The extent of frostbite is difficult to judge until hours after thawing. There are two classifications of frostbite:
- Superficial frostbite is characterized by white, waxy or grayish-yellow patches on the affected areas. The skin feels cold and numb. The skin surface feels stiff and underlying tissue feels soft when depressed.
- Deep frostbite is characterized by waxy and pale skin. The affected parts feel cold, hard, and solid and cannot be depressed. Large blisters may appear after re-warming.

What to do

- Get the victim out of the cold and to a warm place immediately.
- Remove any constrictive clothing items that could impair circulation.
- If you notice signs of frostbite, seek medical attention immediately.
- Place dry, sterile gauze between toes and fingers to absorb moisture and to keep them from sticking together.
- Slightly elevate the affected part to reduce pain and swelling.
- If you are more than one hour from a medical facility and you have warm water, place the frostbitten part in the water (102 to 106 degrees Fahrenheit). If you do not have a thermometer, test the water first to see if it is warm, not hot. Re-warming usually takes 20 to 40 minutes or until tissues soften.
- **What not to do**
- Do not use water hotter than 106 degrees Fahrenheit.
- Do not use water colder than 100 degrees Fahrenheit since it will not thaw frostbite quickly enough.
- Do not rub or massage the frostbite area.
- Do not rub with ice or snow.



Artificial Logs for Fireplaces

- Make sure you open the damper before starting a fire. If you have any questions about whether it is open or clear, investigate with a flashlight before starting the fire.
- Burn one artificial log at a time, and don't add another until the first one is out. For most major brands, each log burns about three hours.
- Don't add wood or paper to the fire, and don't put an artificial log on a wood fire.
- Always use a grate and a fireplace screen.
- If you have a glass door on your fireplace, leave it open.
- Don't move, poke or break up an artificial log while it is burning. The flames can flare up to a surprising extent, and burning material can stick to the tongs or poker.
- If you need to extinguish an artificial log, use a Class B fire extinguisher, water or sand.
- Don't use artificial logs for open-flame cooking or barbecues.
- Keep an eye on the fire if children are around.
- Close the damper only when the ashes are cool.
- Have your chimney inspected (and cleaned, if necessary) regularly.
- Don't leave fires unattended.